



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/682,421	08/31/2001	Donald E. Brodnick	0391999526-0	7784

7590 05/09/2007
Joseph D. Kuborn
Andrus, Sceales, et al
100 E. Wisconsin Ave.
Ste. 1100
Milwaukee, WI 53202

EXAMINER

SMITH, TERRI L

ART UNIT	PAPER NUMBER
----------	--------------

3762

MAIL DATE	DELIVERY MODE
-----------	---------------

05/09/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

09/682,421

Applicant(s)

BRODNICK, DONALD E.

Examiner

Terri L. Smith

Art Unit

3762

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 April 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-72 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-72 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 27 April 2007 have been fully considered but they are not persuasive. It is unclear what correlation Applicant is making between the two different citings from the specification of the present invention at paragraph 29, namely, "...the precordial central terminal is then used by the signal processor 21 as a reference electrode, in lieu of Wilson's central terminal, to generate the precordial leads" and "the terms "resistor network coupled to an operational amplifier." The cited references DO NOT reflect how or that "the reference signal provides a feed into a negative input of an ECG difference amplifier" which is the subject matter that was not described in the original specification and rejected under 35 U.S.C. § 112, first paragraph. The teaching of a reference signal is absent from the two references cited by the Applicant. Applicant has not explained how these references disclose said subject matter. Explaining how a difference amplifier is constructed does not disclose that the reference signal provides a feed into a negative input of an ECG difference amplifier. Where/what is the reference signal? Additionally, regarding Applicant's assertion that "while the explicit term "negative input" may not appear in the specification, it should be noted that the term "subtracted" appears in several places and such negative inputs are shown in the figures of the application," it appears that the Applicant is asserting that stating "the term "subtracted" ... and such negative inputs" equates to "negative input." The Examiner respectfully disagrees. The term "subtracted" in the specification for the present invention does not specifically state that negative inputs are being subtracted nor do the figures show negative inputs. In fact, the words 'negative' and 'input' do not appear anywhere in the specification or the drawings of the present

Art Unit: 3762

invention. It is suggested that Applicant use claim language that is indicative of what is actually disclosed in the specification for the present invention rather than language that is implied and language that has to be interpreted as being disclosed in the specification for the present.

2. Applicant's argument that it "would be obvious to one skilled in the art ..." that the resistor network coupled to an operational amplifier would be a teaching of a difference amplifier is not persuasive because "obvious to one skilled" in the art does not mean it is inherently (100% of the time) produced that way. The resistor network and/or operational amplifier may just be used as a buffer or a way to increase the signal strength and does not necessarily (100% of the time) mean there is a difference amplifier with negative input, least of all with the reference signal fed into the negative input. Additionally, the subtraction of the signals may just be using some other circuitry, such as a microprocessor, or just done in a software routine.

3. Further, it is unclear where in the drawings are seen the "negative inputs." Only Fig. 3 shows a negative input but does not show it going to a negative input of a difference amplifier or that the reference goes to a negative input of difference amplifier (plus Fig. 3 is labeled "Prior Art").

4. Consequently, Examiner maintains the 35 U.S.C. § 112, first paragraph rejection for claims 1-72 as set forth in the Office Action mailed on 07 February 2007 and re-submitted herein below.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it

Art Unit: 3762

pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. Claims 1-72 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In claims 1, 16, 30, 45 and 60, the subject matter, which was not described in the original specification, is "wherein the reference signal provides a feed into a negative input of an ECG difference amplifier" in combination with the other elements in the claims. The original specification does not disclose any teaching on a negative input or and ECG difference amplifier or a reference signal providing a feed into a negative input of an ECG difference amplifier. Consequently, it is respectfully submitted that the aforementioned subject matter is new matter in combination with the other elements in the claims.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this Final Action is set to expire **THREE MONTHS** from the mailing date of this Action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this Final Action and the Advisory Action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the Advisory Action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the Advisory Action. In no event,


Art Unit: 3762

however, will the statutory period for reply expire later than SIX MONTHS from the date of this Final Action.

8. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Terri L. Smith whose telephone number is (571) 272-7146. The Examiner can normally be reached on 7:30 a.m. - 4:30 p.m..

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Angela Sykes can be reached on (571) 272-4955. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


TLS
May 4, 2007

4 May 2007


GEORGE R. EVANISKO
PRIMARY EXAMINER

5/1/07